

Grassy Mountain Mine Project  
On-Site Power Generation Alternative  
Projected Air Emissions

Operating Hours	Units	Peak Ops
Op Hrs per Day	Hrs	24
Days per Month	Days	30
Hrs per Month	Hrs/Mth	720
Power Requirements		
Const. Power	Kw	
Plant	Kw	3200
UG Operations	Kw	500
Total	Kw	3700
Const. Power	MwHrs	0
Plant	MwHrs	10240
UG Operations	MwHrs	1600
Total	MwHrs	11840

Gen Model	HP	Max eKw	# Units	Annual Hours	Back up	Max eKw	# Units	Annual Hours
C32 (60hz)	1198	1250	3	8640	C32 (60hz)	1250	1	500
C18 (60hz) T4	778	500	1	8640	C18 (60hz) T4	500	1	500

Unit	Type	Hr/Yr	Emissions (pounds/hour)								Emissions (tons/year)							
			PM	PM <sub>10</sub>	PM <sub>2.5</sub>	NOx	SO <sub>2</sub>	CO	VOC	CO <sub>2</sub> e	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	NOx	SO <sub>2</sub>	CO	VOC	CO <sub>2</sub> e
Gen 1	C32 (60hz)	8640	0.110231707	0.110231707	0.110231707	9.645274367	0.01453773	9.645274367	0.84459	1389.68	0.476201	0.476201	0.476201	41.667585	0.062803	41.667585	3.6486288	6003.4176
Gen 2	C32 (60hz)	8640	0.110231707	0.110231707	0.110231707	9.645274367	0.01453773	9.645274367	0.84459	1389.68	0.476201	0.476201	0.476201	41.667585	0.062803	41.667585	3.6486288	6003.4176
Gen 3	C32 (60hz)	8640	0.110231707	0.110231707	0.110231707	9.645274367	0.01453773	9.645274367	0.84459	1389.68	0.476201	0.476201	0.476201	41.667585	0.062803	41.667585	3.6486288	6003.4176
Gen 4	C32 (60hz)	500	0.110231707	0.110231707	0.110231707	9.645274367	0.01453773	9.645274367	0.84459	1389.68	0.0275579	0.0275579	0.0275579	2.4113186	0.0036344	2.4113186	0.2111475	347.42
Gen 5	C18 (60hz) T4	8640	0.033069512	0.033069512	0.033069512	0.738552437	0.00944103	3.858109747	0.54849	902.48	0.1428603	0.1428603	0.1428603	3.1905465	0.0407852	16.667034	2.3694768	3898.7136
Gen 6	C18 (60hz) T4	500	0.033069512	0.033069512	0.033069512	0.738552437	0.00944103	3.858109747	0.54849	902.48	0.0082674	0.0082674	0.0082674	0.1846381	0.0023603	0.9645274	0.1371225	225.62
			<b>0.507065852</b>	<b>0.507065852</b>	<b>0.507065852</b>	<b>40.05820234</b>	<b>0.07703298</b>	<b>46.29731696</b>	<b>4.47534</b>	<b>7363.68</b>	<b>1.6072885</b>	<b>1.6072885</b>	<b>1.6072885</b>	<b>130.78926</b>	<b>0.2351889</b>	<b>145.04564</b>	<b>13.663633</b>	<b>22482.006</b>

Emission Factors (g/kw-hr) unless noted				
	C32 (60hz)		C18 (60hz) T4	
PM	0.04	ARB-Cert	0.03	ARB-Cert
PM <sub>10</sub>	0.04	ARB-Cert	0.03	ARB-Cert
PM <sub>2.5</sub>	0.04	ARB-Cert	0.03	ARB-Cert
NOx	3.5	ARB-Cert	0.67	ARB-Cert
SO <sub>2</sub>	0.000012135	lb/hp-hr	0.000012135	lb/hp-hr
CO	3.5	ARB-Cert	3.5	ARB-Cert
VOC	0.000705	lb/hp-hr	0.000705	lb/hp-hr
CO <sub>2</sub> e	1.16	lb/hp-hr	1.16	lb/hp-hr

Diesel Emission Factors (EFs) from Table 3.4-1 of AP-42 for large Ind. Eng. (>600 HP) and Caterpillar Manufacturing Specifications